

# Pre-Operations Report

**Operation Name: South Middle Ridges Thin**

**County: Coos**

**Management Basin: 7**

**Table 1. Operation Areas, Types and Acres**

Area	Type of Operation	Gross Acres	Net Acres
1	Moderate Thinning	191	172
2	Moderate Thinning	285	256
3	Moderate Thinning	256	230
Total		732	658

## **I. PHYSICAL DESCRIPTION OF OPERATION AREA:**

This operation is a three-unit timber sale totaling 658 net acres of partial cut. The timber sale is located on the western slope of the Coast Range in the Ten Mile Lake watershed within the Elliott State Forest Management Basin 7 Johnson Creek sub-basin. This timber sale area is in close proximity to the Pacific Ocean, which has a dominant influence on the climate. The average annual rainfall is between 70-85 inches. Temperatures range from 20-95 degrees Fahrenheit throughout the year. This timber sale has an elevation of 360 to 1560 feet above sea level with slopes ranging from 30 percent to 100 percent. Areas 2 and 3 have southerly and westerly aspects; Area 1 has northerly and southerly aspects. The dominant aspect of the sale area is south facing slopes with a portion of the sale area being north, east and west facing slopes. Areas 1 - 3 have soils that are categorized as Milbury-Bohannon-Umpcoos association (50-80% slope); Areas 2 and 3 have soils that are Preacher-Bohannon Loams (60-90% slope).

## **II. CURRENT STAND CONDITION:**

The timber sale is mostly second growth Douglas-fir that originated after the Coos Bay fire of 1868, ranging in age from 37 to 142. It is primarily composed of Douglas-fir with a minor conifer component of western red cedar, hemlock, and scattered clumps and stringers of red alder trees. Some inventory information is based on measurements taken 14 years ago or longer and may not reflect actual stand level conditions. All of the sale areas have been examined for stocking levels and suitability for thinning treatments. There are a few small areas of 15 to 27 year old stands that are from previous salvage sales and will not be thinned unless a corridor is located within those areas. Table 2 contains stocking, size and age information for all the areas in this timber sale. There are few hard snags in the stand. Stand health is satisfactory which is typical for the Elliott State Forest. The sale area is in the vicinity of a current area of concern for Swiss Needle Cast.

**Table 2. Stand Inventory Information**

Area	Prescription	Stand id <sup>1</sup>	Species	Age in 2007	DBH	BA	TPA	RD	Acres <sup>2</sup>
1	Moderate Thinning	1328	DF..	142	21.0	253	106	55	46
1	Moderate Thinning	1380	DF..	137	20.2	170	76	37	11
1	Moderate Thinning	1381	DF..	93	21.9	255	97	54	69
1	Moderate Thinning	1382	DFCX	115	18.5	196	105	45	36
1	Moderate Thinning	1383	DFWH	115	23.5	210	70	43	5
1	Moderate Thinning	1390	DFWH	37	9.5	217	439	70	5
1	Target <sup>3</sup>	N/A	DF		24.0	180	76	38	172
2	Moderate Thinning	1295	DF..	27	11.2	124	182	37	3
2	Moderate Thinning	1296	DF..	28	9.6	112	221	36	8
2	Moderate Thinning	1297	DF..	104	22.4	192	70	40	62
2	Moderate Thinning	1298	DFCX	117	20.5	236	103	52	24
2	Moderate Thinning	1299	DFWH	29	9.7	106	204	33	1
2	Moderate Thinning	1329	DFWH	102	20.5	238	104	52	30
2	Moderate Thinning	1330	DF..	102	18.4	227	123	52	65
2	Moderate Thinning	1331	DF..	29	9.2	133	285	43	4
2	Moderate Thinning	1333	DF..	137	20.4	278	123	61	25
2	Moderate Thinning	1334	DFRA	124	21.3	196	79	42	23
2	Moderate Thinning	1335	DF..	28	8.8	157	369	52	9
2	Moderate Thinning	1477	DFRA	15	7.2	75	264	27	1
2	Moderate Thinning	2126	DF..	9	6.3	1	6	1	1
2	Target <sup>3</sup>	N/A	DF		23	170	80	36	256
3	Moderate Thinning	1246	DFCX	121	23.4	137	46	28	1
3	Moderate Thinning	1248	DFRA	40	11.6	238	323	69	2
3	Moderate Thinning	1252	DFRA	26	9.4	127	265	41	1
3	Moderate Thinning	1293	DFRA	136	17.3	233	142	55	143

3	Moderate Thinning	1298	DFCX	117	20.5	236	103	52	19
3	Moderate Thinning	1300	DFCX	117	20.2	226	102	50	64
3	Target <sup>3</sup>	N/A	DF		21	170	98	36	230

1. The source of stand inventory information is (SLIP) from 2007 records.

2. The acres are based on GIS, and exclude interior roads, streams buffers, reserve areas, etc.

3. The Target identifies expected stand characteristics (DBH, BA, TPA and RD) after harvesting has been completed.

### III. DESIRED FUTURE CONDITION:

This is mature thinning sale. The desired condition is to maintain and accelerate creation of a more complex stand structure with the further development of an understory of hemlock, red cedar, big leaf maple and myrtle by managing stand density in accordance with the Balanced Landscape strategy of the Elliott State Forest Management Plan. Thinning will allow for development of a more complex stand structure over time.

**Table 3. Stand Structure Information (Does not apply Elliott State Forest)<sup>1</sup>**

### IV. PROPOSED MANAGEMENT PRESCRIPTION:

Areas 1-3: Thinning will target the portions of the stands with dense stocking. In general, stand densities will be reduced to relative densities between 25 and 35. Residual stocking is expected to range from 50 to 80 trees per acre and a residual basal area from 150 to 180 square feet per acre. Final thinning prescriptions will be determined during the sale preparation process.

Snag Retention and Creation - Existing snags within the units will be left, with the exception of those that endanger work crews. Trees that become damaged during the yarding process may be left as snags. One tree per two acres will be topped (50%) or girdled (50%) to promote additional wildlife habitat. Specific instructions for selecting, girdling, and topping trees will be provided by the Southern Oregon Area Biologist during the timber sale layout process.

Down Log Retention – Existing down wood within the units will be left, with the exception of those that endanger work crews.

**V. ESTIMATED TIMBER AND REVENUE OUTPUTS:**

**Table 4. Timber and Revenue**

Ownership		Sale Type	
BOF	CSL	Cash	Recovery
0%	100%		X
Planned Quarter:		4	

	Conifer	Hardwood	Total
Net Volume (MBF)	6,000	75	6,075
Stumpage Value (\$/MBF)	250	400	
Estimated Gross Value	\$ 1,500,000	\$ 30,000	\$ 1,530,000
		Project Costs:	\$50,000
		Estimated Net Value:	\$1,480,000

**VI. HARVESTING AND ACCESS CONSIDERATONS:**

All legal access to the sale is obtained and there are no property lines needing to be surveyed. No new spur construction is anticipated though some new landings may need to be constructed in the sale area. Final locations will be determined during the sale preparation process. Segments of roads that are within/adjacent to the sale area will be examined to determine if pullback of sidecast is necessary. Lidar should be available to help discover any unstable sidecast on old roads that are being opened up. Final stockpile location will be determined during the timber sale preparation process. Unnumbered dirt spurs in the timber sale area will be waterbarred and blocked following completion of operations.

Area 1: 2000 road (rocked mainline, good shape), 2160 road (rocked spur) and 2170 road (rocked spur)

Area 2: 2000 road (rocked mainline, good shape), 2180 road (dirt spur, re-open and improve) and 2190 (dirt spur, re-open and improve)

Area 3: 2000 road (rocked mainline, good shape), 2198 road (dirt spur, re-open and improve), 2200 road (rocked collector), 2208 road (dirt spur, re-open and improve), 2209 road (dirt spur, re-open and improve), 2210 road (dirt spur, re-open and improve)

Winter harvesting will require purchaser supplied rock. Existing roads and landings in some locations will be improved to allow operations and will be evaluated to determine if pullback of side cast is necessary. Additional landings and short access spurs may be constructed. Final locations will be determined during the sale preparation process.

The majority of the sale areas will be uphill cable yarded.

**Table 5. Transportation Management Summary (Miles).**

Activity	Mainline	Collector	Rocked Spur	Dirt Spur
Construct	0.0	0.0	0.0	0.0
Improve	0.0	0.0	0.0	3.8
Maintain	2.3	1.4	1.2	3.8
Close/Block	0.0	0.0	0.0	3.8
Vacate	0.0	0.0	0.0	0.0

**VII. AQUATIC RESOURCES AND WATER QUALITY:**

The sale areas are located within the Ten Mile Lake watershed, within the Johnson Creek sub-basin.

Type F and Domestic Use Streams: Johnson Creek is a medium Type F that's adjacent to Area 2 along the western and southwestern side.

There are no known water rights within the proposed operation. There is a point of diversion downstream on Johnson Creek of the proposed operation but will not be affected by the operation due to the distance downstream from the proposed operation.

Type N Streams: All drainages associated with the sale areas have been surveyed for fish presence and will be field surveyed during the 2010 summer low flow period to determine the stream flow and whether stream flow is perennial or seasonal.

**VIII. WILDLIFE AND T&E SPECIES CONSIDERATIONS:**

The older habitat within this sale area may be suitable for certain T and E species. This sale is planned under the standards of the Elliott State Forest Management and Habitat Conservation Plans and other Oregon Department of Forestry (ODF) policy. The specific measures are as follows:

NSO Habitat Retention –The objective of this partial cut sale is to maintain and improve in the health and quality of nesting, roosting and foraging habitat in Basin 7.

Marbled Murrelet – First year protocol surveys were completed in 2008 and second year surveys will be completed in 2009. No portions of the sale are within 330 feet and/or ¼ mile of a Marbled Murrelet Management Area.

Bald Eagle, Other - There are no known bald eagle nest sites or other listed animal species in the vicinity of this sale.

Salmon and Steelhead – Areas 1 and 3: There are no salmon or steelhead located in the stream reaches associated with Areas 1 and 2

Area 2: This is a partial cut area containing approximately 1,400 feet of the upper reaches of Johnson Creek, a medium Type F. Opportunities for placement of large wood have been identified where cable layouts cross Johnson Creek adjacent to Area 2. These placed log structures will create gravel beds and pools improving spawning and wintering habitat. Locations and quantities of large wood placement will be identified during the sale preparation process with the Area Biologist.

Plants – No listed plant records were identified within the sale area.

Fragmentation – This is a thinning sale of mature timber and will not increase fragmentation of interior mature forest habitat.

#### **IX. SLOPE STABILITY AND GEOTECHNICAL ISSUES:**

This sale has had a map review by an ODF geotechnical specialist. A closer examination will be made during the sale layout process to determine if additional geotechnical review is needed. Portions of areas 1 through 3 are steep enough to meet criteria for classification as High Landslide Hazard Locations. There are a number of small headwater streams draining these areas. These streams are currently unclassified with respect to seasonal flow. Streams in areas 1 and 3 do not appear capable of direct delivery of debris flows to Type F Johnson creek, however mobilization of debris flow material during high stream flows into Type F Johnson creek is possible. Several small SW aspect streams in area 2 appear to be Potential Debris Flow Track Reaches. Given the silvicultural prescription for the sale, it is unnecessary to apply Potential Debris Flow Track Reach management standards

#### **X. RECREATION RESOURCES:**

The most common recreation for this area is hunting and dispersed undeveloped recreation. Harvesting this unit will provide forage areas to help promote healthy deer and elk populations. In addition, areas of bare soil around road edges and landings will be grass seeded after logging to provide forage. Surrounding forest types provide escape cover. No conflict is seen with respect to the undeveloped, dispersed recreation usage of the forest.

#### **XI. CULTURAL RESOURCES:**

There are no cultural sites associated with this sale.

#### **XII. SCENIC RESOURCES:**

The units are not within any scenic management areas. There are no scenic management constraints for this sale. No significant conflicts with users are anticipated.

**XIII. OTHER RESOURCE CONSIDERATIONS:**

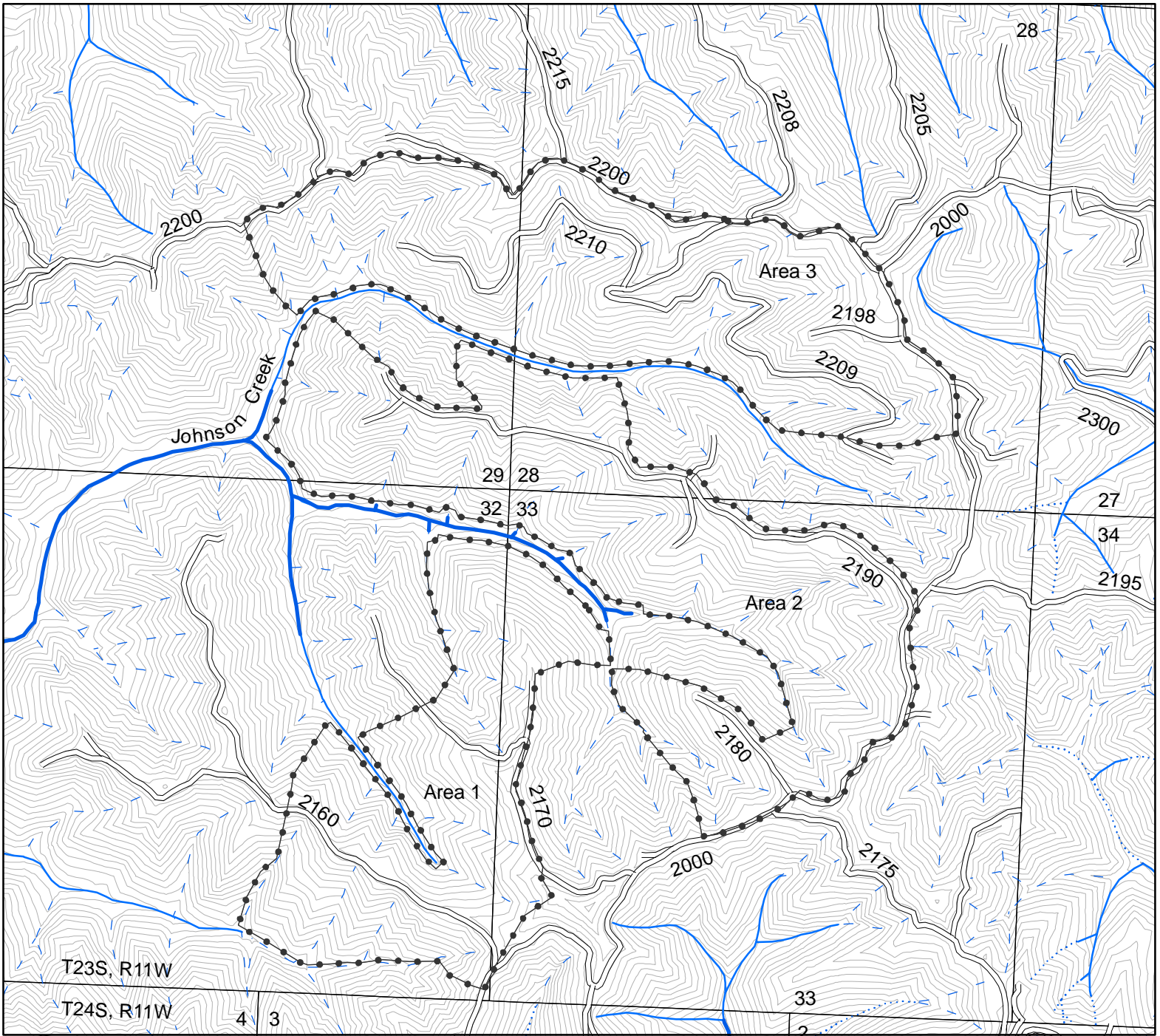
There are no other known resource considerations associated with this sale.









**XIV. LAND MANAGEMENT CLASSIFICATION SUMMARY:**

**Table 6. Land Use Classification Summary**

Area	Production
1	172
2	256
3	230

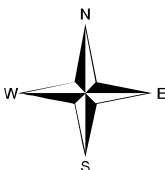
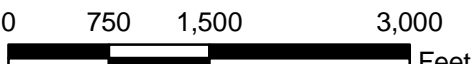
This table summarizes the acres in each land use class within the operation.



-  Timber Sale Boundary
-  Existing Roads
-  Type F Streams
-  Type N Perennial Streams
-  Type N Seasonal Streams
-  Unclassified Streams
-  Section Line
-  40 Foot Contours

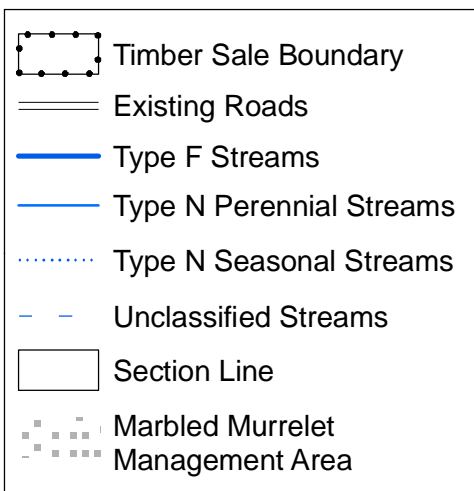
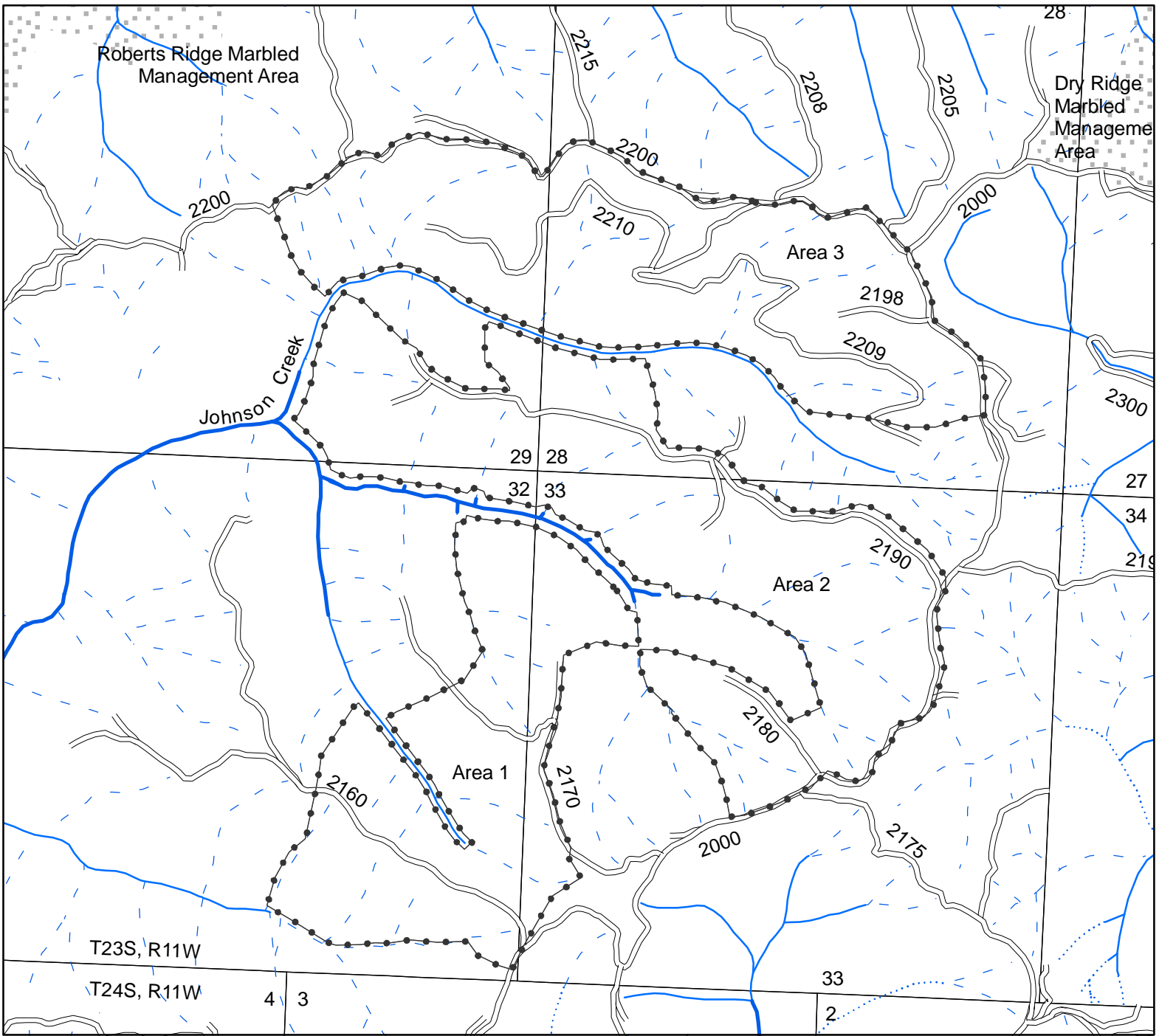
**South Middle Ridges Thin**  
 -- Topography --  
**FY 10 Sale Plan**  
**Coos District**

Portions of Sections 28, 29,  
 32 and 33  
 T23S, R11W, W.M.  
 Coos County, Oregon

Sale Area	Harvest Type	Net Acres
1	Partial Cut	172
2	Partial Cut	256
3	Partial Cut	230
<b>Total</b>		<b>658</b>

Coos District GIS  
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 for legal, or surveying purposes.



**South Middle Ridges Thin**  
 -- Key Resources --  
**FY 10 Sale Plan**  
**Coos District**  
 Portions of Sections 28, 29,  
 32 and 33  
 T23S, R11W, W.M.  
 Coos County, Oregon

0    750    1,500    3,000  
 Feet

Sale Area	Harvest Type	Net Acres
1	Partial Cut	172
2	Partial Cut	256
3	Partial Cut	230
<b>Total</b>		<b>658</b>

1" = 1,500  
 Scale 1:18,000  
**Attachment C**

Coos District GIS  
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